

# Multilevel Relations between Adolescents' Religiosity, Socio-Economic Status, and Autonomy/Relatedness Values in 10 Cultures

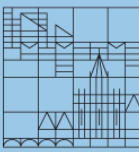
Boris Mayer & Gisela Trommsdorff

University of Konstanz

**Symposium:** Autonomy and Relatedness from a Developmental Cross-Cultural Perspective

**Convenors:** Boris Mayer & Olaf Reis





# Acknowledgments

This study is part of the international



## “Value of Children and Intergenerational Relations”-Project

Principal Investigators: Prof. Dr. G. Trommsdorff & Prof. Dr. B. Nauck

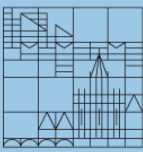
Funded by the Deutsche Forschungsgemeinschaft

We would like to thank all collaborators from the participating countries.

The team leaders are:

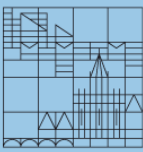
**Gang Zheng** (People's Republic of China), **Colette Sabatier** (France),  
**Gisela Trommsdorff & Bernhard Nauck** (Germany), **Ramesh Mishra** (India),  
**Peter R. Nelwan** (Indonesia), **Asher Ben-Arieh & Muhammad M. Haj-Yahia**  
(Israel & The Palestinian Authority), **Chiaki Yamada** (Japan), **Karl Peltzer** (South  
Africa), **Karen Fux** (Switzerland), **Bilge Ataca & Cigdem Kagitcibasi** (Turkey).





## Aim of the Study

- Explore multilevel relations between Religiosity & SES and adolescents' Autonomy/Relatedness (in terms of *Family Models*) across 10 countries
- 3 family model value profiles identified by Mayer (2009) based on Kagitcibasi's (2007) formulation of 3 family models
- Psychological significance of **religiosity** esp. for close relationships (Granqvist, Miculincer, & Shaver, 2010; Saroglou, 2010)
- Religion and Religiosity important factors in adolescent development, especially for family values and preferences (French et al., 2008; Pearce & Thornton, 2007; Sabatier et al., 2010; Saroglou, Delpierre, & Dernelle, 2004)



## Three Ideal-Typical Family Models (Kagitcibasi, 2007)

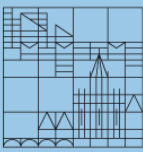
- Family Model of Independence
  - Emotional and material **Independence**
  - industrialized Western cultures, individualistic
- Family Model of Interdependence
  - Emotional and material **Interdependence**
  - traditional agrarian cultures, collectivistic
- Family Model of Emotional Interdependence
  - Continuing **emotional Interdependence**
  - Declining **material Interdependence**
  - modernizing cultures with collectivistic background

Autonomy &  
Separateness

Heteronomy &  
Relatedness

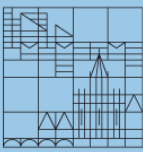
Autonomy &  
Relatedness





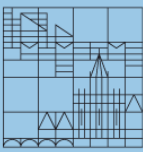
## Antecedents of Family Model Value Profiles

- Kagitcibasi (2007): SES should be related to preference of
  - **Independent** over both **Interdependent Family Models**
  - **Emotionally Interdependent** over **Interdependent Family Model**
  - at both levels of analysis (individual & cultural)
- Religiosity not recognized as relevant factor for family model formation in Kagitcibasi's theory
- **How do culture-level and individual-level Religiosity & SES play together in affecting adolescents' family orientation?**



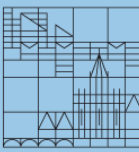
# Variables & Measures

- Dependent Variable
  - Adolescents' Preference for one of the three *Family Model Value Profiles*
  - Based on the results of the cluster analysis by Mayer (2009)
- Religiosity: 1 Item
  - Importance of Religious Beliefs  
(1 = Not important at all - 5 = Very important)
  - Individual level: Group centered
  - Cultural level: Aggregated
- Socio-Economic Status:
  - Individual level: self-reported *Economic Status of the family compared to others in the respective country* (1 = Low - 5 = Upper)
  - Cultural level: *Human Development Index* (HDI) (UNDP, 2009)

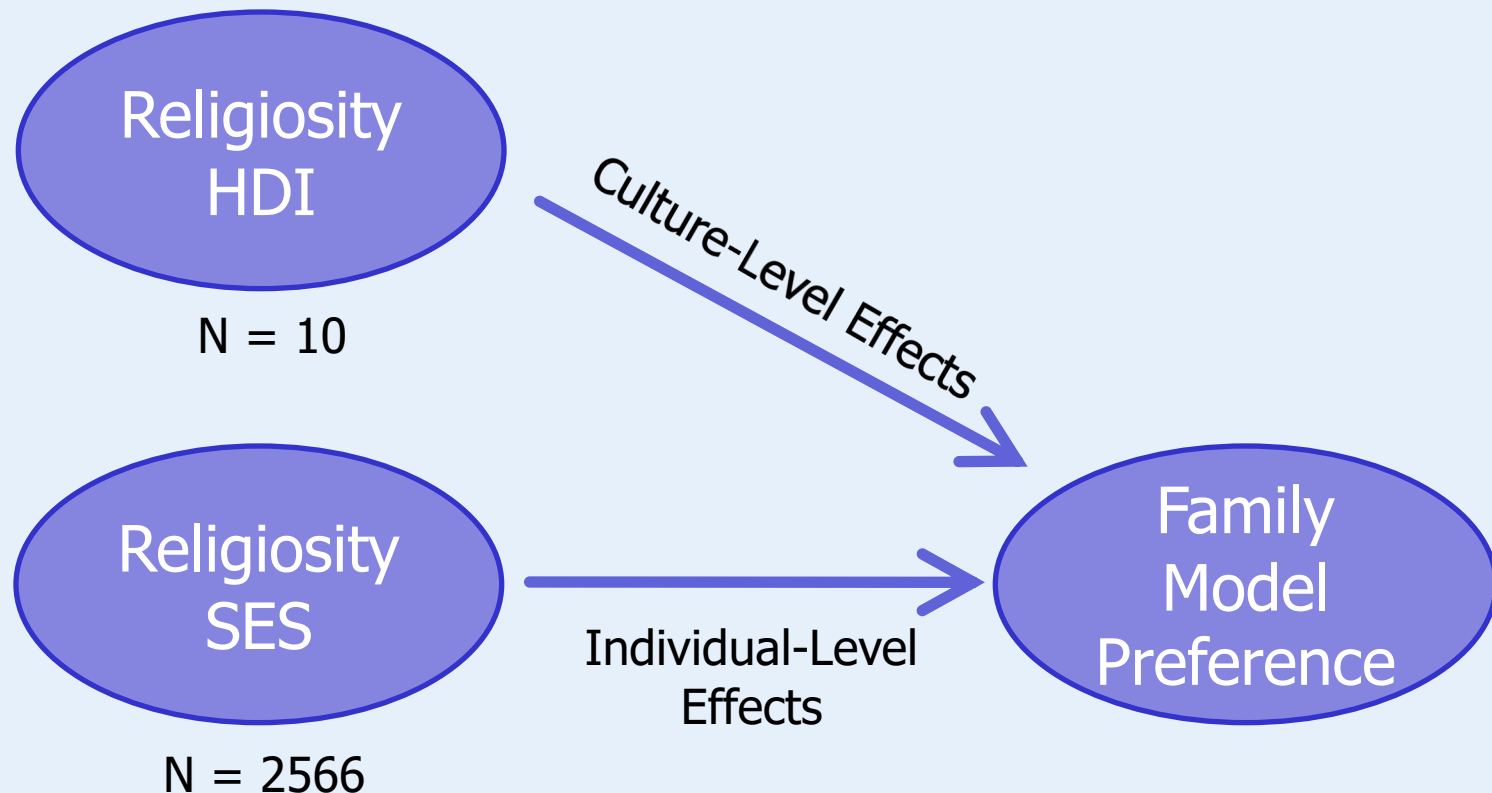


# Multilevel Modeling

- Allows modeling effects of individual-level predictors and of culture-level predictors simultaneously (Raudenbush et al., 2004)
- In this case: Hierarchical *Non-Linear* Modeling
  - Polytomous dependent variable: Hierarchical logistic regression
  - Full PQL-estimation including random effects
  - Separate models for the two predictors (Religiosity & SES)
  - Testing additional models to include all three category contrasts of the dependent variable
- Low number of level-2 entities (only 10 countries)
  - Results may be unreliable
  - 10 countries considered minimum (Nezlek, 2006)



# Overview of the Proposed Multilevel Model



*Note.* HDI: Human Development Index. SES: Socio-Economic Status.



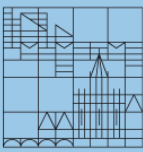


# Sample

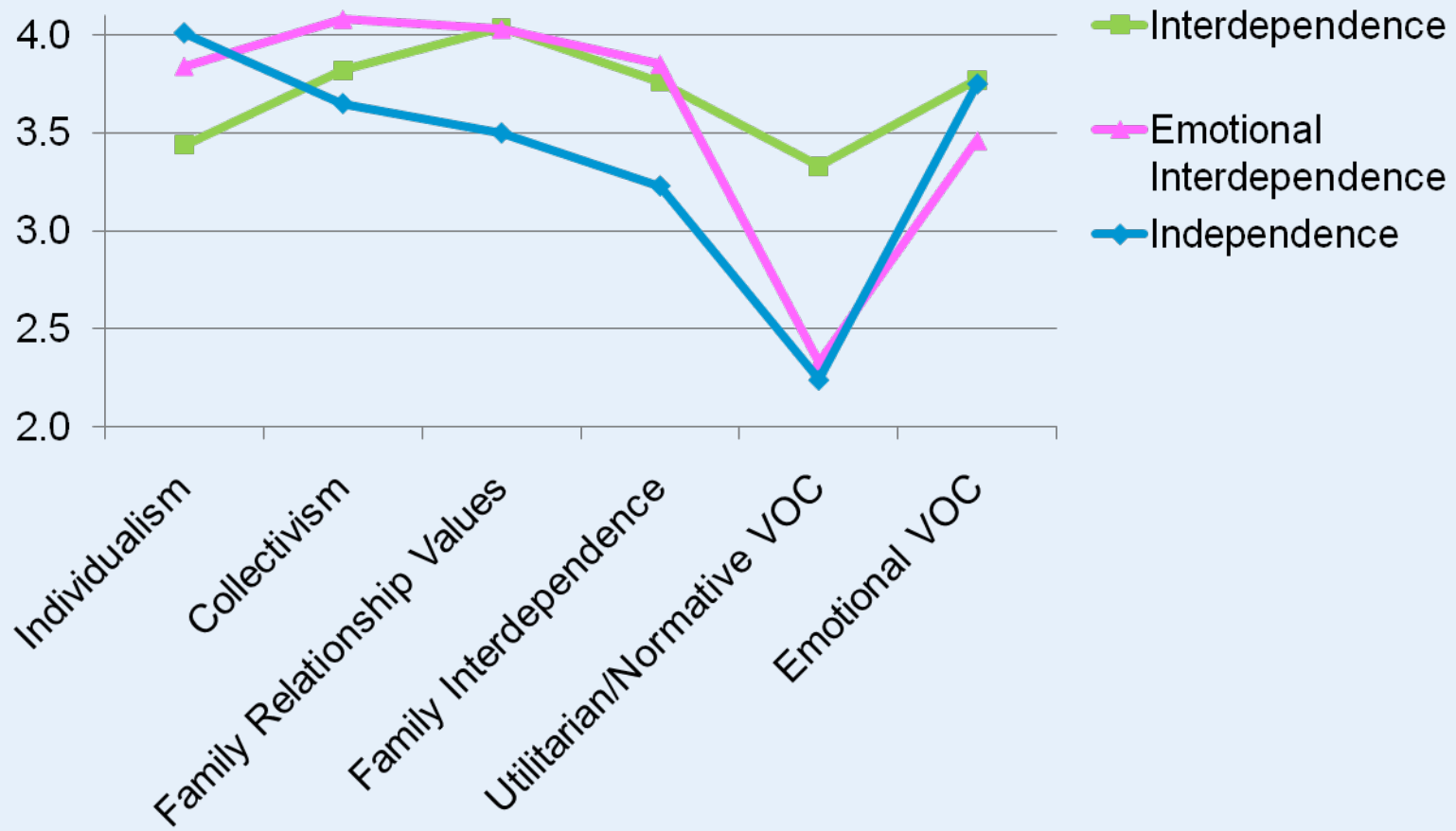
Country	HDI	M Religiosity	M SES	M Age	N
India	.612	4.27	3.17	16.0	300
South Africa	.683	4.14	2.63	15.0	317
Indonesia	.734	4.84	2.83	15.3	300
China	.772	2.28	2.68	13.8	306
Turkey	.806	3.89	3.14	14.7	306
Israel	.935	3.41	3.09	15.8	188
Germany	.947	2.23	3.22	15.7	311
Japan	.960	1.63	3.09	16.5	207
Switzerland	.960	2.54	3.17	19.8	131
France	.961	2.45	3.14	15.7	200
<b>Total</b>	<b>.837</b>	<b>3.17</b>	<b>3.02</b>	<b>15.5</b>	<b>2566</b>

Note. Correlation of HDI & M Religiosity:  $r = -.75$

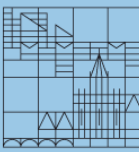




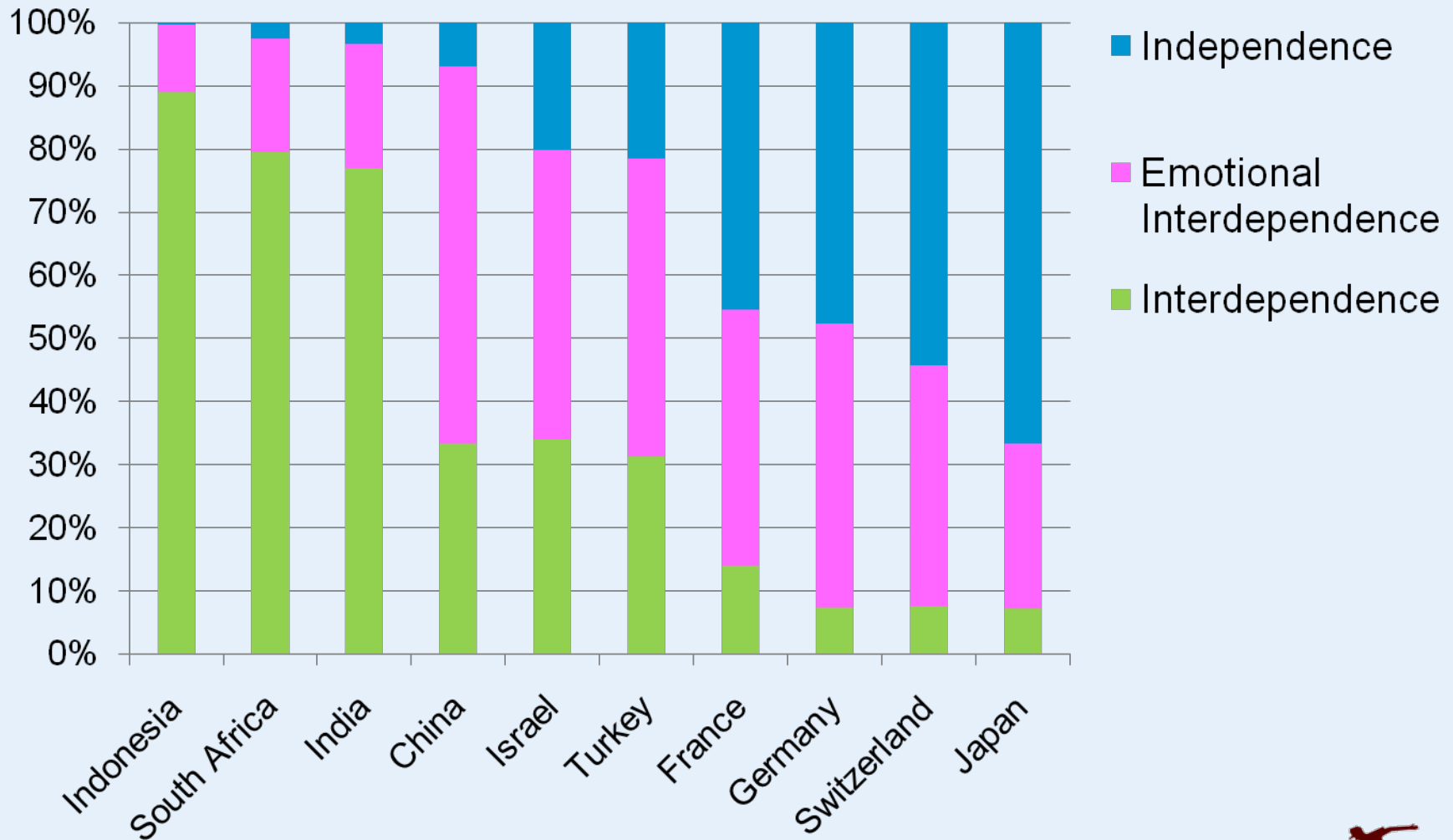
# Family Model Value Profiles (Mayer, 2009)



*Note.* Cluster analysis, N = 2566 adolescents from 10 countries.



# Cross-Cultural Distribution of Value Profiles (Mayer, 2009)

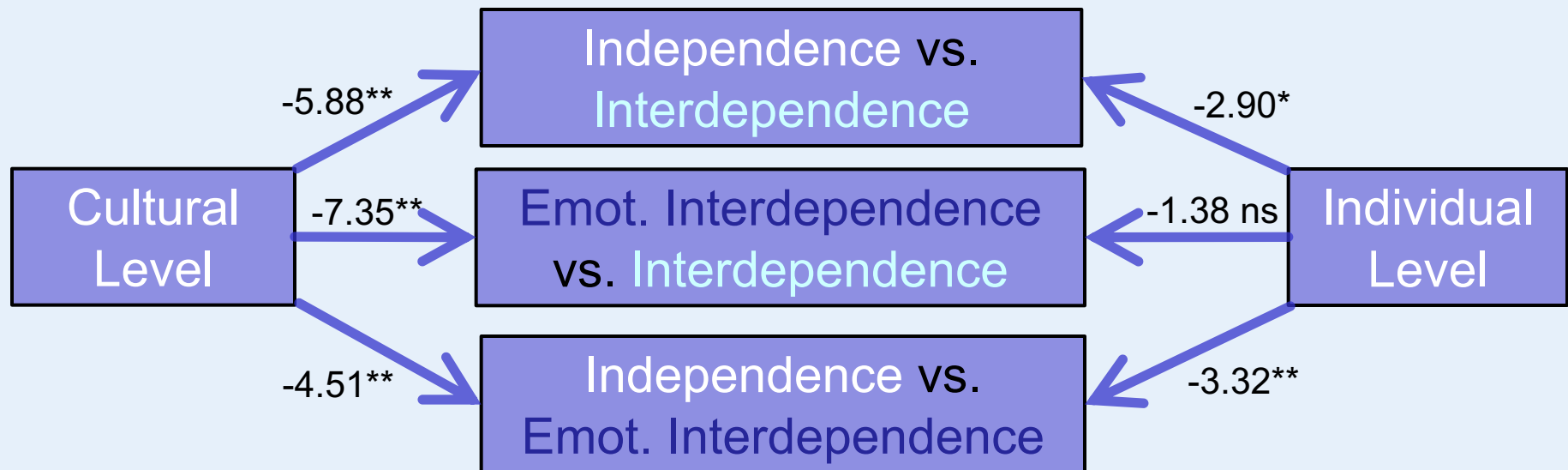




## Results for *Religiosity*

At both levels, higher ***Religiosity*** related to preference of both *interdependent family models* over *independent family model*.

At cultural level only, higher average ***Religiosity*** related to preference of *(totally) interdependent family model* over *emotionally interdependent family model*.



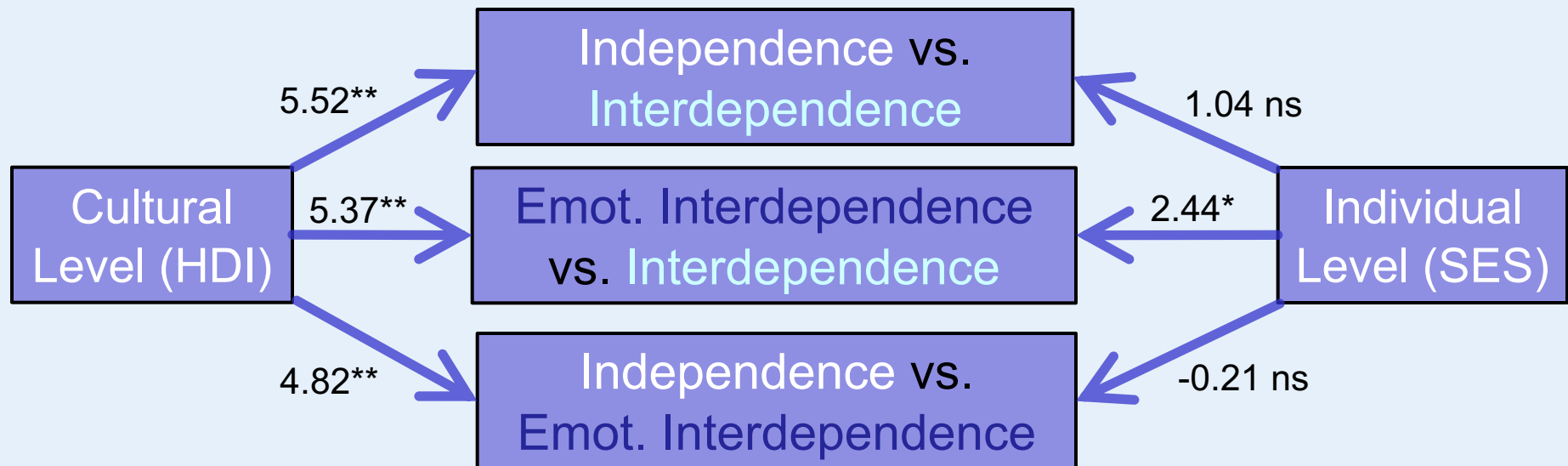
Note. T-values. +  $p < .10$ . \*  $p < .05$ . \*\*  $p < .01$ .



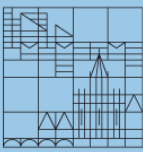
## Results for *Socio-Economic Status*

At cultural level, **HDI** strongly predicted preference for the *independent* over both *interdependent* family models, and for the *emotionally interdependent* as compared to the *(totally) interdependent family model*.

At individual level, hardly any significant relations between **SES** and family model preference.

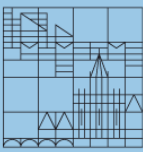


Note. T-values. +  $p < .10$ . \*  $p < .05$ . \*\*  $p < .01$ .



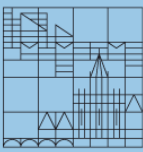
## Results cont.

- Culture-level ***Religiosity*** accounted for **73 %** of the cross-cultural variation in adolescents' family model value profiles
- Culture-level ***Socio-Economic Status (HDI)*** accounted for **77 %** of the cross-cultural variation in family model value profiles
- Together, both predictors accounted for **87 %** of this variation
- Percentage of variation accounted for = average reduction of variance component (intercept) across all three category contrasts



## Summary of Results

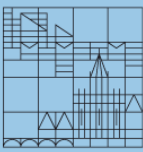
- ***Culture-level and Individual-level Religiosity*** related to preference of more interdependent family models
  - Religious adolescents (coming from religious cultures) exhibit a higher family orientation
- ***HDI*** related to preference of independent family model, and of emotionally interdependent over interdependent family model
  - as expected according to Kagitcibasi (2007): HDI related to lower material interdependencies among family members
- ***SES*** unrelated to family model preference, except emotional interdependence over interdependence
  - national context SES more important than individual SES



## Discussion

- Importance of **Religiosity** for adolescents family orientation confirmed
- Culture-level relevance of **SES** confirmed
- Why lack of individual-level **SES** effects?
- **Why is there a culture-level effect of Religiosity** regarding the preference of the interdependent family model over the emotionally interdependent family model **but no individual-level effect?**
  - Religious **cultures** may be opposed to the autonomy orientation inherent in the *Family Model of Emotional Interdependence*
  - Religious **individuals** may have no problems with this autonomy orientation (combined with the relatedness orientation in this model)





# Limitations & Further Research

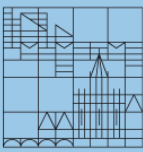
- Limitations

- Low number of countries for multilevel analysis
- Religiosity measured by 1 item (but see also Schwartz & Huismans, 1995)
- Different religions/religious affiliations not considered → very “global” method of relating religiosity to autonomy/relatedness values

- Further Research

- Individual-level effect of Religiosity stronger in religious cultures? (Sabatier et al., subm.) → more cultures/countries needed
- More in-depth studies on the relation between religiosity and the balance of autonomy/relatedness needed





## Conclusion

- This study wanted to shed light on **SES** and **Religiosity** as
  - **culture-level & individual-level antecedents of adolescents'**  
**Family Model Value Profiles** across cultures
- **Results suggest strong culture-level effects:**
  - Both religiosity and SES (inversely) related to independent/interdependent value profiles
  - Autonomy/Relatedness appears as “transitional model”
  - Individual Religiosity not opposed to combining autonomy & relatedness in adolescence



# Thank you for your attention!

For more information:

**[boris.mayer@uni-konstanz.de](mailto:boris.mayer@uni-konstanz.de)**

